

CLAIMS

1. A system for performing environmental measurements and for transferring measuring data, wherein the system comprises

5 a plurality of base stations of a cellular radio system, the base stations comprising means for transferring data in the cellular radio system,

a plurality of environmental measuring stations each being connected to one of the plurality of base stations, the measuring stations comprising

measuring means for performing environmental measurements, and

10 control means for transferring measuring data to the respective base station that it is connected to for transferring the measuring data further over said cellular radio system,

and each said environmental measuring station is physically placed on the same site as the base station that it is connected to and is physically connected to the respective base station,

15 a central equipment connected to the cellular radio system for collecting environmental measuring data from the plurality of environmental measuring stations through the base stations of the cellular radio system, and

20 terminal devices of the cellular radio system for receiving data relating to the environmental measurements via the cellular radio system.

2. A system according to claim 1, wherein the system comprises a data adapter for adapting the data transferred from the measuring station to the base station into a format suitable for the base station and correspondingly for adapting the data coming from the base station to the measuring station into a format suitable for the measuring station.

3. A system according to claim 1, wherein it comprises in said central equipment means for collecting announcements that are sorted regionally and are based upon the collected measuring data, and for transmitting said announcements to terminal devices over the cellular radio system.

4. A system according to claim 1, wherein the control means of one of the plurality of environmental measuring stations have been arranged to transfer

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measuring data to a terminal device being in the coverage area of the base station.

5. A system according to claim 1, wherein at least one of said plurality of environmental measuring stations comprises a memory for storing at least one predetermined alarm limit in connection with a certain measurement and means for comparing the measuring data obtained based upon a measurement performed by the measuring means with said alarm limit and for generating an alarm signal when said alarm limit is exceeded.

6. A system according to claim 1, wherein the system has been arranged to transfer said measuring data in a data call or in a short-message over the cellular radio system.

7. A method for performing environmental measurements and for transferring measuring data, wherein the method comprises the steps of performing environmental measurements in connection with a base station of a cellular radio system and physically on the same site where the base station is located,

transferring results representative of the measured environmental data forward to the base station in order to transfer said results further over said cellular radio system,

collecting said results at a central location from the environmental measuring station through the base station of the cellular radio system, and

transferring data relating to the environmental measurements to a terminal device of the cellular radio system.

8. A method according to claim 7, wherein the method further comprises a step of collecting said results through the cellular radio system from environmental measurements at several base stations and creating a regional measuring result based upon them.

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